## Pest Update (August 25-September 1, 2010)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do <u>not</u> send samples of dying plants or insect from other states. If you live outside of South Dakota and have a question, please send a digital picture of the pest or problem instead. **Walnut samples may not be sent in from any location – please provide a picture instead**.

#### Available on the net at:

http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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## **Current concerns**



Fall webworms are on the move and getting bigger. The yellow to brown, tufted larvae are now outside the nests and defoliating trees. The webworm differs from tent caterpillars in time of feeding (spring for tent caterpillars and late summer for webworms) and where they form their nests (interior, near branch crotches, for tent caterpillars and exterior, out on the branches for webworms). The fall webworm favorite foods are cottonwoods.

chokecherries and walnut, but almost any hardwood tree species will do. It is a myth that since they are feeding on leaves that will soon drop anyway that no damage is caused – the next month or so is a time of high productive for leaves and the loss of them will leave the tree going into winter with fewer reserves. Control for the larvae is fairly simple when they are small – less than ½-inch – either just tear the nests open and let the predators and parasites after them. Once they become larger, more than ½-inch, carbaryl (Sevin) should be used as a foliar spray. Usually one application is sufficient to kill the majority of the insects.



I am also getting calls again about walnuts dropping their leaves. It has become almost an annual event. The problem is walnut anthracnose (*Gnomia leptostyla*), a very common fungus disease of this species. As with other anthracnose diseases, the tree becomes infected in the spring as the new leaves emerge in the cool, moist spring environment, but the symptoms – yellowing leaves with black spots that drop

prematurely – do not occur until now. The disease overwinters in

the twigs and fallen leaves (one reason an infected tree only has leaves remaining at the tips is the spores "rain" down from the twigs and these are usually above the "rain." The disease is not harmful to the tree and now is *not* the time for control.





At this time of year I also receive samples of cottonwood leaves that recently fell and are covered with reddish-brown to purple lesions that often have a yellow halo. Usually the only foliage remaining on the tree is at the very tips of the tallest branches. The problem is marssonina leaf spot (*Marssonina brunnea*). This foliar fungal disease is more common on cultivars of cottonwood than the species. The disease can leave some almost

completely defoliated by the end of August. This often weakens the trees, increasing winter injury and susceptibility to drought stress. A common control is to rake up and destroy any fallen leaves to reduce the population of overwintering fungi but this is of limited value and often impractical. Fungicide treatments may provide some control with the most common being applications of a fungicide containing chlorothalonil applied at bud-break. If the weather stays moist, applications may need to be continued on a 7 to 10-day cycle till the summer weather turns dry.

## Information you can use



Well, maybe use. A common phenomenon with a wet summer is fall blooming of some of our spring-flowering trees and shrubs. I received this great picture of a crabapple in bloom this week. The tree has been partially defoliated by apple scab but still is covered with white flowers. The flowering of crabapples, lilacs and other trees at this time of year is not a cause for concern. They will still be ready for winter on time but since some of the flower buds are

opening now there will be fewer blooms on the plant next spring.

#### What trees are native to South Dakota?

I was asked this question earlier this week so here is a list of tree species native to the state. I divided the state into East River and West River as there are some species native to only one of these regions.

# East River Acer negundo Acer saccharinum Acer saccharum Betula papyrifera Crataegus chrysocarpa Crataegus succulenta Celtis occidentalis Fraxinus pennsylvanica

#### West River Acer negundo

Betula papyrifera Crataegus chrysocarpa Crataegus succulenta Celtis occidentalis Fraxinus pennsylvanica

# Common name Boxelder Silver maple Sugar maple Paper birch Fireberry hawthorn Fleshy hawthorn Hackberry Green ash

Gleditsia triacanthos Gymnocladus dioicus

Juglans nigra

Juniperus virginiana

Ostrya virginiana

Prunus americana

Prunus virginiana

Populus deltoides var deltoides

Populus deltoides var occidentalis Populus tremuloides Quercus macrocarpa Quercus x schuettei

Salix amygdaloides

Ulmus americana Ulmus rubra Ulmus thomasii Juglans nigra

Juniperus scopulorum

Ostrya virginiana Picea glauca Pinus contorta Pinus flexilis

Pinus nexins
Pinus ponderosa
Prunus americana
Prunus virginiana
Populus angustifolia

Populus balsamifera

Populus deltoides var occidentalis

Populus tremuloides Quercus macrocarpa

Salix amgdaloides Sorbus scopulina Ulmus americana Honeylocust Coffeetree Black walnut

Rocky Mountain juniper

Eastern redcedar

Ironwood White spruce Lodgepole pine Limber pine Ponderosa pine American plum Chokecherry

Narrowleaf cottonwood Balsam popular Eastern cottonwood Plains cottonwood Quaking aspen

Bur oak Schuette oak Peachleaf willow Greene mountainash

American elm Slippery elm Rock elm

This list includes only the major tree species (several other willows may also be considered trees) and the division of East and West River is not always a clear dividing line. For example, eastern redcedar is found east of the Missouri River except when you get down to Gregory County where it had "jumped" the river. There is also some disagreement among authorities whether our sugar maple is actually a black maple (*Acer nigrum*) and our paper birch is a water birch (*Betula occidentalis*).

## Samples received

**Davison County** 

#### Is this needlecast on the spruce?

Yes, the old fruiting structures were rhizosphaera, a common fungal disease of spruce. The control is two applications of chlorothalonil, the first applied as the new growth reaches about ½ inch in length and the second about three weeks later. This will not cure the disease but they will be able to slow the spread.

Grant County

This pagoda dogwood has extensive dieback. What might be the problem? I also have included a sample from a maple that is developing dark blotches on the leaves. It did this last year.

The maple has tar spot (*Rhytisma* spp), a disease that results in the black blotches forming on the leaves. The disease rarely harms the tree but can make it appear unsightly. The best control is to rake up and destroy all the fallen leaves this October. Fungicide applications are not always effective but a copper-containing fungicide can be applied at bud-break, a week later when the leaves have half opened and a third time when the leaves have fully opened.

The pagoda dogwood has golden canker (*Cryptodiaporthe corni*), an increasingly common disease of this ornamental tree. The disease results in discolored of the bark, often with a distinct line between live and dead tissue and usually affects one stem at a time in clumped trees. The best means of managing the disease is to remove infected branches and stems and reduce stress to the plant by having a layer of mulch beneath the tree to cool the soils. Pagoda dogwood is found in its native environment growing beneath the shade of taller trees and the typical sunny lawn location is not the ideal growing spot. Regardless of care, these trees seem to become canker-ridden after they are about 20 years old.

# Haakon County lilac?

## Is this pseudomonas disease on

Very good observation! Yes, this is the disease and unfortunately we are seeing a lot of it this year. Pruning out infected stems this fall is probably the best control.

# Minnehaha County water?

## What is this plant growing near the

This is sandbar willow, *Salix exigua* ssp *interior*. You'll find it along many streams in eastern South Dakota.

#### Minnehaha County

### Is this simply anthracnose?

There is some anthracnose but there is a lot of injury on this black ash due to the cottony ash psyllid. Considering the longevity of black ash in our region, I doubt if it is worth the time and effort to treat the psyllid.

# Perkins County blotches on the ash leaves?

## What is causing these necrotic

These are due to ash anthracnose. Usually by this time of year, the lesions have developed into large blotches, often along the margin or between veins and the affected tissue has turned grey and crisp.

# Yankton County dieback?

## What is causing this sumac to

These are a number of cankers that affect sumac, most commonly nectria canker which results in dieback of individual branches. This plant appears to be affected by this disease. Verticillium wilt can also occur on sumac but usually an entire stem will die rather than just dieback. I could not find this pathogen in the sample. My only suggestion is prune out any dying stems and branches. Sumac is not always long-lived and I have seen colonies die out after a decade or two.

# Yankton County on the leaves?

### What is causing this black smudges

This is the developing tar spot – see the sample under Grant County for more information.

Yankton County Please identify this plant. It has small fruit in late summer that the bird love.

This is the apple serviceberry, *Amelanchier grandiflora*. It is one of our nicest small ornamental trees. The plant is covered with white flowers in the spring and this display is followed by clusters of reddish-purple fruit that is delicious though the birds often beat us to them!